

EXHIBIT 55

Apple confirms it is working on self-driving cars

Firm reveals secret project in statement to US highways regulator, two years after rumours of its interest began to circulate



Apple offered no details of its project, but highlighted the 'societal benefits' of driverless vehicles. Photograph: Josh Edelson/AFP/Getty Images

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Apple has said for the first time that it is working on technology to develop self-driving cars.

The company, which has been rumoured to be interested in the automated car market for the past two years, confirmed its previously secret initiative in a statement to the US highways regulator.

"The company is investing heavily in the study of machine learning and automation, and is excited about the potential of automated systems in many areas, including transportation," said the letter from Steve Kenner, Apple's director of product integrity, to the head of the National Highway Traffic Safety Administration (NHTSA).

The letter offered no details of the project, instead highlighting the "significant societal benefits of automated vehicles", which it described as a life-saving technology, potentially preventing

millions of car crashes and thousands of fatalities each year.

Although fully automated cars are not expected to be in use in the UK for several years, trials have taken place in Britain and the US.

The British government is keen to ensure that the country is at the forefront of a fast developing market that could be worth £900bn by 2025, according to a KPMG study.

Earlier this year, ministers launched a consultation on changes to motor insurance rules and the highway code aimed at allowing self-driving cars to be on the roads by 2020.

The business secretary, Greg Clark, said at the time: “The global market for autonomous vehicles presents huge opportunities for our automotive and technology firms. The research that underpins the technology and software will have applications way beyond autonomous vehicles.”

Rumours of Apple’s interest in the car market surfaced early last year. Known as Project Titan, the internal initiative was reportedly staffed by more than 1,000 engineers and other personnel working at top secret labs in Sunnyvale, California, some of whom were pulled from important consumer product teams.

The letter from Kenner was dated 22 November, but has only just emerged. It leaves open the possibility that Apple will go on to design and produce a car of its own, rather than merely provide technology to an existing manufacturer. Earlier this year, the company was rumoured to be in talks to take over the British car manufacturer McLaren.

“To maximise the safety benefits of automated vehicles, encourage innovation and promote fair competition, established manufacturers and new entrants should be treated equally,” Apple wrote.

Kenner argued that manufacturers should pool their data as they develop automated systems, to help everyone identify unusual situations or “edge cases” that cars may encounter on the roads.

“Companies should share de-identified scenario and dynamics data from crashes and near misses,” Kenner wrote. “By sharing data, the industry will build a more comprehensive data set than any one company could create alone.”

But the letter added: “Data sharing should not come at the cost of privacy.”

Apple urged the regulator to continue “thoughtful exploration of the ethical issues” of self-driving cars. “Because automated vehicles promise such a broad and deep human impact, companies should consider the ethical dimensions of them in comparably broad and deep terms,” it said.

The letter said these considerations include privacy, how the cars’ software systems make decisions and the impact on employment and public spaces.

Kenner ended the letter by saying: “Apple looks forward to collaborating with NHTSA and other stakeholders so that the significant societal benefits of automated vehicles can be realised safely, responsibly and expeditiously.”

Several large technology companies and traditional car manufacturers are working on automated vehicle technology. Uber has raced ahead of its competitors, deploying Ford Fusions in Pittsburgh, Pennsylvania, which do not require hands on the wheel, as part of the company's regular taxi service.

It is also developing a driverless car in partnership with Swedish carmaker Volvo.

Electric car company Tesla is also involved, although it raised concerns earlier this year about the implications of driverless vehicles after one of its cars using autopilot mode was involved in a fatal crash.

In September, a Google self-driving car collided with another vehicle after the latter ran through a red light.

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